

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. – 4. (Cancelled)

5. (Currently Amended) A method for servicing an inkjet printer including an inkjet printhead with a nozzle plate and a first service module removably installed on the printer, comprising:

identifying a printhead-related service condition not adequately addressed by servicing the printer with the first service module being in an un-worn condition;

providing a second service module with a service function different from the first service module and adapted to address said printhead-related service condition, the second service module removably installable on the printer ~~and with respect to the first service module;~~

removing the first service module from the printer;

installing the second service module in the printer in place of the first service module;

using the second service module, conducting a special printhead-related servicing operation.

6. (Currently Amended) The method of claim 5, further comprising:

after completion of the special printhead-related servicing operation, removing the second service module from the printer; and

~~install~~ installing the first service module in the printer in place of the second service module.

1           7.       (Currently Amended) A method for servicing an inkjet  
2 printhead with a nozzle plate and a first service module removably installed on the printer,  
3 comprising:

4           identifying a printhead-related service condition not adequately addressed by servicing  
5 the printer with the first service module being in an un-worn condition;

6           providing a second service module with a service function different from the first service  
7 module and adapted to address said printhead-related service condition, the second service  
8 module removably installable on the printer and ~~with respect to~~ in place of the first service  
9 module;

10          providing a set of instructions for using the second service module with the inkjet printer  
11 to the printer user, wherein the step of providing a set of instructions includes providing a set of  
12 machine readable printer instruction code for loading into the printer.

1           8.       (Currently Amended) The method of claim 7 wherein the printer is controlled by  
2 a host computer, and wherein the step of ~~using~~ providing the set of instructions includes  
3 downloading the set of printer instruction code from the host computer.

1           9. – 13. (Cancelled)

1           14.       (Currently Amended) A method for servicing an inkjet printer including an inkjet  
2 printhead with a nozzle plate and a first service module removably installed on the printer,  
3 comprising:

4           identifying a printhead-related service condition not adequately addressed by servicing  
5 the printer with the first service module being in an un-worn condition;

6           providing a second service module with a service function different from the first service  
7 module and adapted to address said printhead-related service condition, the second service  
8 module removably installable on the printer and ~~with respect to~~ in place of the first service  
9 module, wherein said printhead-related service condition includes ink on a printhead carriage  
10 interconnect, and the second service module includes a brush arranged to clean the interconnect.

1           15.     (Currently Amended) A method for servicing an inkjet  
2 printhead with a nozzle plate and a first service module removably installed on the printer,  
3 comprising:

4           identifying a printhead-related service condition not adequately addressed by servicing  
5 the printer with the first service module being in an un-worn condition;

6           providing a second service module with a service function different from the first service  
7 module and adapted to address said printhead-related service condition, the second service  
8 module removably installable on the printer and ~~with respect to~~ in place of the first service  
9 module, wherein said printhead-related service condition includes vibration or shock incurred  
10 during shipment or moving of the printer, and the second service module includes a special  
11 capping structure having a range of movement along an axis generally transverse to a nozzle  
12 array of the printhead, and a bias structure which urges the capping structure toward and into  
13 engagement with the printhead during a capping procedure.

1           16.     (Original) The method of claim 15 wherein the special capping structure includes  
2 a relative hard, non-resilient cap structure which contains the printhead during the capping  
3 procedure.

1           17. – 18. (Cancelled)

1           19.     (Currently Amended) A method for servicing an inkjet printer including an inkjet  
2 printhead and a removable first service module, comprising:

3           providing a second service module different from the first service module and adapted to  
4 address a printhead-related service condition not adequately addressed by the first service  
5 module being in an un-worn condition, the second service module removably installable on the  
6 printer and ~~with respect to~~ in place of the first service module;

7           providing a set of instructions for using the second service module with the inkjet printer  
8 to the printer user, wherein the step of providing a set of instructions includes providing a set of  
9 machine readable printer instruction code for loading into the printer;

10          installing the second service module in the printer;

11          conducting a printhead-related service operation using the second service module.

1           20.     (Currently Amended) A method for servicing an inkjet printer including an inkjet  
2 printhead and a removable first service module, comprising:

3           providing a second service module different from the first service module and adapted to  
4 address a printhead-related service condition not adequately addressed by the first service  
5 module being in an un-worn condition, the second service module removably installable on the  
6 printer and ~~with respect to~~ in place of the first service module;

7           providing a set of instructions for using the second service module with the inkjet printer  
8 to the printer user, wherein the printer is controlled by a host computer, and the step of providing  
9 a set of instructions includes downloading the set of printer instruction code from the host  
10 computer;

11          installing the second service module in the printer;

12          conducting a printhead-related service operation using the second service module.

1           21.     (Canceled)

1           22.     (Currently Amended) A method for servicing an inkjet  
2 printhead and a removable first service module, comprising:

3           providing a second service module different from the first service module and adapted to  
4 address a printhead-related service condition not adequately addressed by the first service  
5 module being in an un-worn condition, the second service module removably installable on the  
6 printer and ~~with respect to~~ in place of the first service module;

7           installing the second service module in the printer;

8           conducting a printhead-related service operation using the second service module;

9           after completion of the printhead-related servicing operation, removing the second  
10 service module from the printer; and

11          installing the first service module in the printer in place of the second service module.

1           23. – 26. (Cancelled)

1           27.     (Currently Amended) A method for servicing an inkjet printer including an inkjet  
2 printhead and a removable first service module, comprising:

3           providing a second service module different from the first service module and adapted to  
4 address a printhead-related service condition not adequately addressed by the first service  
5 module being in an un-worn condition, the second service module removably installable on the  
6 printer and ~~with respect to~~ in place of the first service module;

7           installing the second service module in the printer;

8           conducting a printhead-related service operation using the second service module;

9           wherein said printhead-related service condition includes ink on a printhead carriage  
10 interconnect, and the second service module includes a cleaning element arranged to clean the  
11 interconnect during a special cleaning mode with the printhead removed from the carriage.

1           28. – 29. (Cancelled)

1           30.     (Currently Amended) ~~A special service module~~ An apparatus for use in an inkjet  
2 printing system including an inkjet printhead and a standard service module removably installed  
3 in the printing system, the apparatus comprising a special service module configured to be  
4 removably installed in the printing system in place of the standard service module to perform a  
5 special service function on the printhead which is not performed by the standard service module  
6 being in an un-worn condition, the special service module removably installable on the printer  
7 and ~~with respect to~~ in place of the standard service module.

1           31.     (Previously Presented) A method for servicing an inkjet printer including an  
2 inkjet printhead with a nozzle plate and a first service module removably installed on the printer,  
3 comprising:  
4           identifying a printhead-related service condition not adequately addressed by servicing  
5 the printer with the first service module;  
6           providing a second service module with a service function different from the first service  
7 module and adapted to address said printhead-related service condition;  
8           removing the first service module from the printer;  
9           installing the second service module in the printer in place of the first service module;  
10          using the second service module, conducting a special printhead-related servicing  
11 operation;  
12          after completion of the special printhead-related servicing operation, removing the  
13 second service module from the printer; and  
14          installing the first service module in the printer in place of the second service module.

1           32.     (Currently Amended) A method for servicing an inkjet printer including an inkjet  
2 printhead with a nozzle plate and a first service module removably installed on the printer,  
3 comprising:

4           identifying a printhead-related service condition not adequately addressed by servicing  
5 the printer with the first service module in an ~~un-used~~ un-worn condition, said printhead-related  
6 service condition including vibration or shock incurred during shipment or moving of the printer;  
7 ~~the second service module including a special capping structure having a range of movement~~  
8 ~~along an axis generally transverse to a nozzle array of the printhead, and a bias structure which~~  
9 ~~urges the capping structure toward and into engagement with the printhead during a capping~~  
10 ~~procedure, and wherein the special capping structure including a relative hard, non-resilient cap~~  
11 ~~structure which contacts the printhead during the capping procedure;~~

12           providing a second service module with a service function different from the first service  
13 module and adapted to address said printhead-related service condition~~[[;]],~~wherein the second  
14 service module includes a special capping structure having a range of movement along an axis  
15 generally transverse to a nozzle array of the printhead, and a bias structure which urges the  
16 capping structure toward and into engagement with the printhead during a capping procedure,  
17 and wherein the special capping structure including a relative hard, non-resilient cap structure  
18 which contacts the printhead during the capping procedure; and

19           performing the capping procedure with the second service module installed in the printer,  
20 and maintaining contact between the non-resilient cap structure and the printhead to prevent a  
21 pumping action on the printhead when subjected to vibration and shock.

1           33.     (Previously Presented) The method of claim 32, wherein a constant closed  
2 volume is maintained between the cap structure and the printhead during the capping procedure.

1           34. – 44. (Cancelled)

1           45.     (Currently Amended) An inkjet printing system, comprising:  
2           an inkjet printhead;  
3           a service area for performing service functions on the printhead;  
4           a first service module for removable mounting at the service area to perform service  
5 functions on the printhead during a standard printhead service mode;  
6           a second service module for removable mounting at the service area in place of the first  
7 service module to perform a different service function from that performed by the first service  
8 module in an ~~unused~~ un-worn condition on the printhead during a special printhead service  
9 mode.

1           46.     (Previously Presented) The system of Claim 45 further comprising:  
2           a printhead carriage for mounting the printhead and arranged for traversing movement  
3 along a print area and for moving to the service area;  
4           a service carriage for removably mounting the first service module or the second service  
5 module.